SilentGuard® Series Vinyl Windows 3-Part Guide Specification

SECTION 08 56 73

(MasterFormat 1995 Edition: 08560)

SOUND CONTROL VINYL WINDOWS

THIS SPECIFICATION SECTION HAS BEEN PREPARED TO ASSIST DESIGN PROFESSIONAL IN THE PREPARATION OF PROJECT OR OFFICE MASTER SPECIFICATIONS. IT FOLLOWS GUIDELINES ESTABLISHED BY THE CONSTRUCTION SPECIFICATIONS INSTITUTE, AND THEREFORE MAY BE USED WITH MOST MASTER SPECIFICATION SYSTEMS WITH MINOR EDITING.

EDIT CAREFULLY TO SUIT PROJECT REQUIREMENTS. MODIFY AS NECESSARY AND DELETE ITEMS THAT ARE NOT APPLICABLE. VERIFY THAT REFERENCED SECTION NUMBERS AND TITLES ARE CORRECT. (NUMBERS AND TITLES REFERENCED ARE BASED ON *MASTERFORMAT*, 2004 EDITION).

THIS SECTION ASSUMES THE PROJECT MANUAL WILL CONTAIN COMPLETE DIVISION 1 DOCUMENTS INCLUDING 01 25 13 – PRODUCT SUBSTITUTION PROCEDURES, SECTIONS 01 33 00 – SUBMITTAL PROCEDURES, 01 62 00 – PRODUCT OPTIONS, 01 66 00 – PRODUCT STORAGE AND HANDLING REQUIREMENTS, 01 74 00 – CLEANING AND WASTE MANAGEMENT, 01 77 00 – CLOSEOUT PROCEDURES, AND 01 78 00 – CLOSEOUT SUBMITTALS. CLOSE COORDINATION WITH DIVISION 1 SECTIONS IS REQUIRED. IF THE PROJECT MANUAL DOES NOT CONTAIN THESE SECTIONS, ADDITIONAL INFORMATION SHOULD BE INCLUDED UNDER THE APPROPRIATE ARTICLES.

THIS IS AN OPEN PROPRIETARY SPECIFICATION ALLOWING USERS THE OPTION OF APPROVING OTHER MANUFACTURERS THAT COMPLY WITH THE CRITERIA SPECIFIED HEREIN.

NOTES TO THE SPECIFIER ARE CONTAINED IN BOXES AND SHOULD BE DELETED FROM FINAL COPY.

OPTIONAL ITEMS REQUIRING SELECTION BY THE SPECIFIER ARE ENCLOSED WITH BRACKETS, E.G. [35] [40] [45]. MAKE APPROPRIATE SELECTIONS AND DELETE OTHERS.

ITEMS REQUIRING ADDITIONAL INFORMATION ARE UNDERLINED BLANK SPACES, E.G. _____.

OPTIONAL PARAGRAPHS REQUIRING SELECTION OF ONE OF THE OPTIONS ARE SEPARATED BY “OR” WITHIN A BOX, E.G.

OR

BOLD FACE TYPE IDENTIFIES OPTIONAL PARAGRAPHS AND FEATURES THAT MAY BE INCLUDED OR DELETED DEPENDING ON PROJECT REQUIREMENTS. CONVERT THE BOLD FACE TYPE TO REGULAR TYPE WHEN INCLUDING THESE PARAGRAPHS OR FEATURES.

REVISE FOOTER TO SUIT PROJECT/OFFICE REQUIREMENTS.

ELECTRONIC VERSIONS OF THIS SPECIFICATION UTILIZE AUTOMATIC PARAGRAPH NUMBERING.

WHEN EDITING IS COMPLETE, DELETE ALL TEXT ON THIS PAGE, THEN REMOVE THE SECTION BREAK AT THE TOP OF THE NEXT PAGE TO REMOVE THIS PAGE FROM THE DOCUMENT.

SPECIFICATION BEGINS ON THE FOLLOWING PAGE.

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes: Tubular extruded, rigid polyvinyl chloride (PVC) sound control windows of the following type(s):
   1. **Horizontal rolling windows.**
   2. **Single-hung windows.**
   3. **Casement windows.**
   4. **Awning windows.**
   5. **Picture windows.**

B. Related Sections

INSERT APPROPRIATE SECTION NUMBERS AND TITLES BELOW FOR WINDOW FLASHING AND INSTALLATION SEALANT.

   1. **__ __ __ - _____.**
   2. **__ __ __ - _____.**

IF VINYL SLIDING DOORS ARE USED IN CONJUNCTION WITH THIS SECTION, MANUFACTURER RECOMMENDS INSULATED GLAZING UNITS AND UNIT COMPONENTS THAT MEET THE ACOUSTICAL PERFORMANCE REQUIREMENTS OF THE PROJECT.

   3. **08 34 73 – Sound Control Vinyl Sliding Doors.**

INCLUDE APPROPRIATE LANGUAGE BELOW IF PRODUCTS SPECIFIED IN THIS SECTION ARE TO BE BID AS ALTERNATES. OTHERWISE DELETE FOLLOWING PARAGRAPH.

C. Alternate Proposals:
   1. Reference Section 01 23 00 – Alternates.

1.02 REFERENCES

A. AAMA – American Architectural Manufacturers Association
   1. AAMA/WDMA/CSA 101/I.S.2/A440 – Standard/Specification for Windows, Doors and Unit Skylights
   2. AAMA 303 – Voluntary Specification for rigid Polyvinyl Chloride (PVC) Exterior Profiles
   3. AAMA 701 – Voluntary Specification for Pile Weatherstripping and Replaceable Fenestration Weatherseals
   4. AAMA 902 – Voluntary Specification for Sash Balances
   5. AAMA 2400 – Standard Practice for Installation of Windows with a Mounting Flange in Stud Frame Construction

B. FMA – Fenestration Manufacturers Association
   1. FMA/AAMA 100 – Standard Practice for the Installation of Windows with Flanges or Mounting Fins in Wood Frame Construction

C. ANSI – American National Standards Institute
   1. ANSI Z97.1 – American National Standard for Safety Glazing Materials Used in Buildings

D. ASTM – American Society for Testing and Materials
   1. ASTM C 1036 – Standard Specification for Flat Glass
   2. ASTM C 1172 – Standard Specification for Laminated Architectural Flat Glass
   3. ASTM D 4216 – Standard Specification for Rigid Poly Vinyl Chloride (PVC) and Related PVC and Chlorinated Poly Vinyl Chloride (CPVC) Building Products Compounds
   4. ASTM E 90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements

5. ASTM E 283 – Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
6. ASTM E 330 – Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
7. ASTM E 331 – Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
8. ASTM E 413 – Classification for Rating Sound Insulation
9. ASTM E 547 – Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference
10. ASTM E 774 – Standard Specification for the Classification of the Durability of Sealed Insulating Glass Units
11. ASTM E 1300 – Standard Practice for Determining Load Resistance of Glass in Buildings
12. ASTM E 1332 – Standard Classification for Determination of Outdoor-Indoor Transmission Class
13. ASTM E 2112 – Standard Practice for Installation of Exterior Windows, Doors and Skylights
14. ASTM E 2190 – Standard Specification for Insulating Glass Unit Performance and Evaluation
15. ASTM F 588 – Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact.

E. CMBSO/CAWM – California Association of Window Manufacturers
   1. CAWM 301 – Forced Entry Resistance Tests for Windows

F. NFRC – National Fenestration Rating Council
   1. NFRC 100 – Procedure for Determining Fenestration Product U-Factors

1.03 SUBMITTALS

A. Reference Section 01 33 00 – Submittal Procedures - Submit following items:
   1. Product Data: Provide manufacturer's standard details and catalog data demonstrating compliance with referenced standards.
   2. Shop Drawings: Include window schedule detailing sizes, glazing types, muntin types and designs, window elevations, sections and details for each project condition, and multiple window assembly details.
   3. Selection Samples:
      a. For each finish product specified, two complete sets of color samples: Minimum 1 inch by 4 inch (25 mm by 100 mm) samples of PVC with integral color representing manufacturer's full range of available colors and patterns.
      b. Glass, showing available tint colors.
   4. Verification Samples:
      a. For each finish specified, two color samples: Minimum 1 inch by 4 inch (25 mm by 100 mm) samples of PVC with integral color, representing actual product, color, and patterns.
      b. Glass showing specified tint colors
   5. Quality Assurance/Control Submittals:
      a. Qualifications: Proof of manufacturer's qualifications.
      b. U-Factor, solar heat gain coefficient and structural rating charts required for AAMA and NFRC labeling requirements.
      c. Manufacturers' Installation Recommendations.

B. Closeout Submittals: Reference Section 01 78 00 – Closeout Submittals: submit following items:
   1. Temporary window labels marked to identify windows that labels were applied to.
   2. Maintenance instructions.
   3. Special Warranties.

1.04 QUALITY ASSURANCE

A. Overall Standards: Comply with AAMA/WDMA/CSA 101/I.S.2/A440, except as otherwise noted herein.

B. Qualifications:
   1. Manufacturer Qualifications:
      a. Minimum five years experience in producing vinyl windows of the type(s) specified.
      b. Participant in good standing in nationally recognized certification and labeling program.
      c. Member National Fenestration Ratings Council (NFRC)

INSERT LOCAL REGULATORY REQUIREMENTS BELOW.

C. Regulatory Requirements:

D. Certifications for insulated glass windows:
   1. AAMA: Windows shall be Gold Label certified with label attached to frame per AAMA requirements.
   2. NFRC: Windows shall be NFRC certified with temporary U-factor label applied to glass and an NFRC tab added to permanent AAMA, Keystone or NAMI Certifications frame label.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Reference Section 01 66 00 – Product Storage and Handling Requirements.

B. Follow manufacturer's instructions on label applied to windows.

1.06 WARRANTY

SELECT "RESIDENTIAL' WARRANTY BELOW FOR OWNER OCCUPIED SINGLE FAMILY RESIDENTIAL AND OWNER OCCUPIED CONDOMINIUM PROJECTS. SELECT "COMMERCIAL" WARRANTY FOR NON-OWNER OCCUPIED CONDOMINIUMS, COMMERCIAL, AND APARTMENT PROJECTS.

A. Residential Special Warranty:
   1. Warranty unit components against defects in materials and workmanship to original owner for life (refer to manufacturer's written warranty for details).
   2. Warranty insulated glass units against failure to original owner for 25 years (refer to manufacturer's written warranty for details).
   3. Warranty to include the cost of parts for the life of the warranty and the cost of labor for one year from the date of purchase (refer to manufacturer's written warranty for details).

OR

B. Commercial Special Warranty:
   1. Warranty unit components against defects in materials and workmanship for ten years (refer to manufacturer's written warranty for details).
   2. Warranty insulated glass units against failure for ten years (refer to manufacturer's written warranty for details).
   3. Warranty to include the cost of parts for the life of the warranty and excludes labor (refer to manufacturer's written warranty for details).

PART 2 – PRODUCTS

2.01 MANUFACTURER

A. Atrium Companies, Inc.
12775 E. 38th Ave.
Denver, CO 80239

Tel: (800) 375-5570
Fax: (303) 375-1212
Website: http://www.silent-guard.com/

INSERT NAME, ADDRESS AND PHONE NUMBERS OF MANUFACTURER'S REPRESENTATIVE BELOW.

1. Manufacturer's Representative:
   _____ Tel: _____
   _____ Fax: _____
   _____ E-mail: _____

B. Window Series: Atrium Silent Guard Series 7000.

C. Substitutions: Reference Section 01 25 13 – Product Substitution Procedures.

2.02 MATERIALS

A. Vinyl: Integral color PVC compound containing impact-resistant solid plasticizer, titanium dioxide UV inhibitor, and surface and color stabilizers.
   1. Comply with AAMA 303, ASTM D 4216 and ANSI/AAMA/NWDA 101/I.S.2./A440

VERIFY THAT WINDOW FLASHING MATERIAL AND INSTALLATION SEALANT IS SPECIFIED IN APPROPRIATE SECTIONS.

2.03 GENERAL PERFORMANCE REQUIREMENTS

A. Thermal Performance: Comply with NFRC 100.

B. Air Leakage Resistance, Water Penetration Resistance, Structural Loading: Comply with AAMA/WDMA/CSA 101/I.S.2/A440.

C. Forced Entry Resistance: Comply with CAWM 301

D. Acoustical Performance: Comply with ASTM E 90, ASTM E 413 and ASTM E 1332.

2.04 WINDOW TYPES

SELECT FOLLOWING WINDOW TYPES BASED ON PROJECT REQUIREMENTS. DELETE WINDOW TYPES NOT USED.

A. Horizontal Rolling Window – Model 7000 (XO/OX Configuration):
   1. Frame: Minimum 4.50 inch (110.25 mm) deep, multi-chambered rigid vinyl (PVC) profile with a 1.50 inch wide mounting flange located 1 inch from exterior face of frame.
   2. Primary Sash: Minimum 1.125 inch (27.56 mm) deep, multi-chambered rigid vinyl (PVC) profile.
   3. Secondary Sash: Minimum 1 inch (25.40 mm) deep, multi-chambered rigid vinyl (PVC) profile.
   4. Uniform Structural Load Pressure per ASTM E 330: 37.5 psf minimum
   5. Water Penetration Resistance per ASTM E 547 and ASTM E 331: 5.25 psf minimum
   6. Air Leakage Resistance per ASTM E 283 (1.57psf): 0.10 cfm/ft^2 maximum
   7. Design Pressure: +/-25 up to 72 inches by 60 inches (183 cm x 152 cm).
   8. Performance Grade: Light Commercial, HS-DW-LC25.

STC/EWR/OITC RRATINGS VARY DEPENDING UPON THE TYPE OF GLAZING SELECTED. ENTER THE ACOUSTICAL PERFORMANCE REQUIREMENTS BELOW BASED ON PROJECT REQUIREMENTS AND THE TYPE OF GLAZING SELECTED FROM THE GLASS AND GLAZING SECTION.

   9. Acoustical Performance per ASTM E 90:
      a. STC: _____
      b. EWR: _____
      c. OITC: _____
   10. Forced Entry Resistance per CAWM 301: No entry
   11. Hardware:
      a. Dual wheel assemblies comprised of brass wheel and stainless steel axel in a rigid plastic housing (2 sets per operating sash).
      b. Integral rigid vinyl (PVC) sash pull (1 per operating sash).

c. Spring-loaded, self latching lock with corresponding keeper (minimum 1 per operating sash).

12. Weatherstripping: Fin seal high-density polypropylene pile with Mylar fin, minimum 0.220 inches high and complying with AAMA 701.

B. Horizontal Rolling Window – Model 7000 (XOX Configuration):

1. Frame: Minimum 4.50 inch (110.25 mm) deep, multi-chambered rigid vinyl (PVC) profile with a 1.50 inch wide mounting flange located 1 inch from exterior face of frame.
2. Primary Sash: Minimum 1.125 inch (27.56 mm) deep, multi-chambered rigid vinyl (PVC) profile.
3. Secondary Sash: Minimum 1 inch (25.40 mm) deep, multi-chambered rigid vinyl (PVC) profile.
4. Uniform Structural Load Pressure per ASTM E 330: 37.5 psf minimum
5. Water Penetration Resistance per ASTM E 547: 5.25 psf minimum
6. Air Leakage Resistance per ASTM E 283 (1.57psf): 0.10 cfm/ft^2 maximum
7. Design Pressure: +/-25 up to 96 inches by 60 inches (244 cm x 152 cm).
8. Performance Grade: Light Commercial, HS-DW-LC25.

STC/EWR/OITC RRATINGS VARY DEPENDING UPON THE TYPE OF GLAZING SELECTED. ENTER THE ACOUSTICAL PERFORMANCE REQUIREMENTS BELOW BASED ON PROJECT REQUIREMENTS AND THE TYPE OF GLAZING SELECTED FROM THE GLASS AND GLAZING SECTION.

9. Acoustical Performance per ASTM E 90:
   a. STC: _____
   b. EWR: _____
   c. OITC: _____
10. Forced Entry Resistance per CAWM 301: No entry
11. Hardware:
    a. Dual wheel assemblies comprised of brass wheel and stainless steel axel in a rigid plastic housing (2 sets per operating sash).
    b. Integral rigid vinyl (PVC) sash pull (1 per operating sash).
    c. Spring-loaded, self latching lock with corresponding keeper (minimum 1 per operating sash).
12. Weatherstripping: Fin seal high-density polypropylene pile with Mylar fin, minimum 0.220 inches high and complying with AAMA 701.

C. Vertical Hung Window – Model 7100:

1. Frame: Minimum 4.50 inch (110.25 mm) deep, multi-chambered rigid vinyl (PVC) profile with a 1.50 inch wide mounting flange located 1 inch from exterior face of frame.
2. Primary Sash: Minimum 1.125 inch (27.56 mm) deep, multi-chambered rigid vinyl (PVC) profile, removable side-load type.
3. Secondary Sash: Minimum 1 inch (25.40 mm) deep, multi-chambered rigid vinyl (PVC) profile, removable side-load type.
4. Uniform Structural Load Pressure per ASTM E 330: 52.5 psf minimum
5. Water Penetration Resistance per ASTM E 547 and ASTM E 331: 6.75 psf minimum
6. Air Leakage Resistance per ASTM E 283 (1.57psf): 0.07 cfm/ft^2 maximum
7. Design Pressure:
   a. Single Unit +/-35 up to 48 inches by 78 inches (121 cm x 198 cm).
   b. Twin Unit +/-35 for sizes up to 88 inches by 75 inches (223 cm x 190 cm).
8. Performance Grade: Light Commercial, H-DW-LC35.

STC/EWR/OITC RRATINGS VARY DEPENDING UPON THE TYPE OF GLAZING SELECTED. ENTER THE ACOUSTICAL PERFORMANCE REQUIREMENTS BELOW BASED ON PROJECT REQUIREMENTS AND THE TYPE OF GLAZING SELECTED FROM THE GLASS AND GLAZING SECTION.

9. Acoustical Performance per ASTM E 90:
   a. STC: _____
   b. EWR: _____
   c. OITC: _____
10. Forced Entry Resistance per CAWM 301: No entry
11. Hardware:

a. Concealed, heavy-duty block and tackle balancers (2 per operating sash) and complying with AAMA 902.
b. Integral rigid vinyl (PVC) sash lift (1 per operating sash).
c. Spring-loaded, self latching lock with corresponding keeper (minimum 1 per operating sash).

12. Weatherstripping: Fin seal high-density polypropylene pile with Mylar fin, minimum 0.220 inches high and complying with AAMA 701.

D. Casement Window – Model 7500:

1. Frame: Minimum 4.50 inch (110.25 mm) deep, multi-chambered rigid vinyl (PVC) profile with a 1.125 inch wide mounting flange located 1.00 inch from exterior face of frame.
2. Primary Sash: Minimum 4.207 inch (103 mm) deep, multi-chambered rigid vinyl (PVC) profile.
3. Secondary Sash: Minimum 1.36 inch (33.32 mm) deep, multi-chambered rigid vinyl (PVC) profile and contained within the primary sash
4. Uniform Structural Load Pressure per ASTM E 330: 82.71 psf minimum
5. Water Penetration Resistance per ASTM E 547: 8.35 psf minimum
6. Air Leakage Resistance per ASTM E 283 (1.57psf): 0.02 cfm/ft^2 maximum
7. Design Pressure: +/-55 up to 36 inches by 72 inches (88 cm x 176 cm).
8. Performance Grade: Commercial, C-C55.

STC/EWR/OITC RRATINGS VARY DEPENDING UPON THE TYPE OF GLAZING SELECTED. ENTER THE ACOUSTICAL PERFORMANCE REQUIREMENTS BELOW BASED ON PROJECT REQUIREMENTS AND THE TYPE OF GLAZING SELECTED FROM THE GLASS AND GLAZING SECTION.

9. Acoustical Performance per ASTM E 90:
   a. STC: _____
   b. EWR: _____
   c. OITC: _____
10. Forced Entry Resistance per ASTM F 588: Grade 10. No entry.
11. Hardware:
    a. Dual steel arm rotary operator with fold-down handle.
    b. Single lever, multi-point, locking mechanism with corresponding keepers.
    c. Four bar stainless steel hinges.
12. Weatherstripping: Minimum 1 row 0.30 inch foam filled vinyl bulb around full perimeter of exterior vent leg, minimum 1 row 0.187 x 0.230 inch woolpile and fin around full perimeter of exterior face at innermost frame step and 1 row 0.187 x 0.230 inch woolpile and fin around full perimeter of secondary sash leg and complying with AAMA 701.

E. Awning Window – Model 7600:

1. Frame: Minimum 4.50 inch (110.25 mm) deep, multi-chambered rigid vinyl (PVC) profile with a 1.125 inch wide mounting flange located 1.00 inch from exterior face of frame.
2. Primary Sash: Minimum 4.207 inch (103 mm) deep, multi-chambered rigid vinyl (PVC) profile.
3. Secondary Sash: Minimum 1.36 inch (33.32 mm) deep, multi-chambered rigid vinyl (PVC) profile and contained within the primary sash
4. Uniform Structural Load Pressure per ASTM E 330: 82.71 psf minimum
5. Water Penetration Resistance per ASTM E 547: 9.19 psf minimum
6. Air Leakage Resistance per ASTM E 283 (1.57psf): 0.01 cfm/ft^2 maximum
7. Design Pressure: +/-55 up to 48 inches by 36 inches (118 cm x 88 cm).
8. Performance Grade: Commercial, C-C55.

STC/EWR/OITC RRATINGS VARY DEPENDING UPON THE TYPE OF GLAZING SELECTED. ENTER THE ACOUSTICAL PERFORMANCE REQUIREMENTS BELOW BASED ON PROJECT REQUIREMENTS AND THE TYPE OF GLAZING SELECTED FROM THE GLASS AND GLAZING SECTION.

9. Acoustical Performance per ASTM E 90:
   a. STC: _____
   b. EWR: _____
   c. OITC: _____
10. Forced Entry Resistance per ASTM F 588: Grade 10. No entry.

11. Hardware:
    a. Dual steel arm rotary operator with fold-down handle.
    b. Lever action locking mechanism with corresponding keepers (2 per window).
    c. Four bar stainless steel hinges.
12. Weatherstripping: Minimum 1 row 0.30 inch foam filled vinyl bulb around full perimeter of exterior vent leg, minimum 1 row 0.187 x 0.230 inch woolpile and fin around full perimeter of exterior face at innermost frame step and 1 row 0.187 x 0.230 inch woolpile and fin around full perimeter of secondary sash leg and complying with AAMA 701.

F. Fixed Window – Model 7200:
1. Frame: Minimum 4.50 inch (114.30 mm) deep, multi-chambered rigid vinyl (PVC) profile with a 1.50 inch wide mounting flange located 1 inch from exterior face of frame.
2. Secondary Frame: Minimum 1.360 inch (34.54 mm) deep, multi-chambered rigid vinyl (PVC) profile, removable.
3. Uniform Structural Load Pressure per ASTM E 330: 60.00 psf minimum
5. Water Penetration Resistance per ASTM E 547 and ASTM E 331: 12.00 psf minimum
6. Air Leakage Resistance per ASTM E 283 (6.24 psf): 0.01 cfm/ft^2 maximum
7. Design Pressure: +/-40 up to 72 inches by 72 inches (183 cm x 183 cm).
8. Performance Grade: Commercial, F-DW-C40.

STC/EWR/OITC RRATINGS VARY DEPENDING UPON THE TYPE OF GLAZING SELECTED. ENTER THE ACOUSTICAL PERFORMANCE REQUIREMENTS BELOW BASED ON PROJECT REQUIREMENTS AND THE TYPE OF GLAZING SELECTED FROM THE GLASS AND GLAZING SECTION.

9. Acoustical Performance per ASTM E 90:
    a. STC: _____
    b. EWR: _____
    c. OITC: _____
10. Forced Entry Resistance per CAWM 301: No entry
11. Weatherstripping: Fin seal high-density polypropylene pile with Mylar fin, minimum 0.220 inches high and complying with AAMA 701.

2.05 ACCESSORIES

A. Block frame configuration: Nail fin removed for replacement applications.

2.06 GLASS AND GLAZING

A. Acoustical Sealed Insulating and Monolithic Glass:
1. Glass and glazing shall comply with ASTM C 1036, E 774 or E 2190 (Class A), C1172, ANSI Z97.1 and E 1300 as required and shall consist of:
    a. **Horizontal Rolling Window – Model 7000**
        i. [**STC 40**, **EWR 39**, **OITC 29** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.125 inch (3 mm) [annealed] [tempered] flat glass]
        ii. [**STC 42**, **EWR 40**, **OITC 28** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
        iii. [**STC 46**, **EWR 46**, **OITC 32** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]

iv. [**STC 47**, **EWR 46**, **OITC 32** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.25 inch (6 mm) laminated glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.5625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]

b. **Vertical Hung Window – Model 7100**
   i. [**STC 40**, **EWR 39**, **OITC 28** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.125 inch (3 mm) [annealed] [tempered] flat glass]
   ii. [**STC 43**, **EWR 42**, **OITC 29** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   iii. [**STC 46**, **EWR 45**, **OITC 29** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   iv. [**STC 47**, **EWR 46**, **OITC 31** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.25 inch (6 mm) laminated glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.5625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   v. [**STC 48**, **EWR 47**, **OITC 33** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.25 inch (6 mm) laminated glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.5625 inch air space, and the secondary glazing consisting of a single piece of 0.25 inch (6 mm) laminated glass]

c. **Casement Window – Model 7500**
   i. [**STC 40**, **EWR 39**, **OITC 30** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.125 inch (3 mm) [annealed] [tempered] flat glass]
   ii. [**STC 42**, **EWR 42**, **OITC 35** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.125 inch (3 mm) [annealed] [tempered] flat glass and 1 piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass separated by a 0.625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   iii. [**STC 42**, **EWR 44**, **OITC 37** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.625 inch air space, and the secondary glazing consisting of a single piece of 0.25 inch (6 mm) laminated glass]
   iv. [**STC 43**, **EWR 44**, **OITC 36** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.25 inch (6 mm) laminated glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.5625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   v. [**STC 44**, **EWR 45**, **OITC 37** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.25 inch (6 mm) laminated glass and 1 piece of 0.125 inch [annealed]

[tempered] flat glass separated by a 0.5625 inch air space, and the secondary glazing consisting of a single piece of 0.25 inch (6 mm) laminated glass]

d. **Awning Window – Model 7600**
   i. [**STC 39**, **EWR 39**, **OITC 31** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.125 inch (3 mm) [annealed] [tempered] flat glass]
   ii. [**STC 44**, **EWR 45**, **OITC 37** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass and 1 piece of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.625 inch air space, and the secondary glazing consisting of a single piece of 0.25 inch (6 mm) [annealed] [tempered] flat glass]
   iii. [**STC 42**, **EWR 43**, **OITC 36** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.625 inch air space, and the secondary glazing consisting of a single piece of 0.25 inch (6 mm) laminated glass]

e. **Picture Window – Model 7200**
   i. [**STC 40**, **EWR 38**, **OITC 25** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.125 inch (3 mm) [annealed] [tempered] flat glass]
   ii. [**STC 44**, **EWR 43**, **OITC 31** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 2 pieces of 0.125 inch (3 mm) [annealed] [tempered] flat glass separated by a 0.6875 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   iii. [**STC 46**, **EWR 45**, **OITC 32** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   iv. [**STC 47**, **EWR 46**, **OITC 34** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.25 inch (6 mm) laminated glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.5625 inch air space, and the secondary glazing consisting of a single piece of 0.1875 inch (5 mm) [annealed] [tempered] flat glass]
   v. [**STC 48**, **EWR 47**, **OITC 38** acoustical performance level glazing with the primary glazing being a 0.9375 inch overall thickness insulating glass unit consisting of 1 piece of 0.25 inch (6 mm) laminated glass and 1 piece of 0.125 inch [annealed] [tempered] flat glass separated by a 0.5625 inch air space, and the secondary glazing consisting of a single piece of 0.25 inch (6 mm) laminated glass]

2. Insulating Unit Glazing Type: [Clear/Clear][Low-E/Clear][Low-E/Clear, argon gas filled].
3. Glass shall be placed on blocks and secured to frame using a double sided adhesive, closed cell foam glazing tape.

IF MULTIPLE ACOUSTICAL RATINGS ARE REQUIRED FOR THE PROJECT, BE CERTAIN THAT THE ACOUSTICAL RATING/GLAZING TYPE FOR EACH WINDOW IS CLEARLY NOTED ON DRAWINGS AND/OR WINDOW SCHEDULE.

2.07 DIVIDED LITE GRIDS

VERIFY THAT DESIRED GRID PATTERNS, IF ANY, ARE SHOWN ON THE DRAWINGS. CERTAIN GRID PATTERNS MAY NOT BE AVAILABLE WITH ONE OR THE OTHER BAR TYPES IN THE FOLLOWING PARAGRAPH – CONSULT MANUFACTURER FOR AVAILABLILITY OF UNUSUAL DESIGN APPLICATIONS.

A. [0.625 inch (16 mm) wide flat] [0.625 inch (16 mm) wide sculptured] metal bars color matched to frame and sash.

B. Grids shall be contained within the airspace of insulated glass units.

2.08 INSECT SCREENS

A. Provide tight-fitting screen for operating sash with hardware to allow easy removal.
   1. Frame: Roll formed aluminum with rigid plastic corner keys.
   2. Screen Cloth: 18 by 16 charcoal colored fiberglass mesh secured to frame by flexible vinyl spline.

2.09 FABRICATION

A. Fabricate frames and sash with mitered and fusion welded corners and joints. Trim and finish corners and welds to match adjacent surfaces.

B. Provide concealed metal reinforcement in sash frame for attaching lock mechanism.

C. Factory exterior glaze with snap-on PVC glazing bead stops matching interior sash and frame finish, except where field glazing is required due to large window unit dimensions. Units shall be reglazable without dismantling sash framing.

2.10 FINISH

A. Frame and Sash Color: [White] [Almond].

B. Color match screen frame to frame and sash color.

C. Exposed surfaces of all members shall be clean and free from all but minor surface blemishes.

2.11 SOURCE QUALITY CONTROL

A. Inspect windows in accordance with manufacturer's Quality Control Program as required by the applicable certification program.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine openings in which windows will be installed.
   1. Verify that framing and substrate comply with AAMA 2400, ASTM E 2112 or AAMA/FMA 100 requirements.
   2. Verify that fasteners in framed walls are fully driven and will not interfere with window installation.

B. Coordinate with responsible entity to correct unsatisfactory conditions.

C. Commencement of work by installer is acceptance of substrate conditions.

3.02 INSTALLATION

A. Install windows in framed walls in accordance with manufacturer's recommendations, AAMA 2400, ASTM E 2112 or AAMA/FMA 100 and all applicable building codes.

B. Do not remove temporary labels.

C. Install insect screens on operable sash.

3.03 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

3.04 ADJUSTING

A. Adjust operating sash and hardware for smooth operation and tight fit with weather-stripping.

3.05 CLEANING

A. Reference Section 01 74 00 – Cleaning and Waste Management.

B. Remove temporary labels and retain for Closeout Submittals.

C. Clean soiled surfaces and glass using a mild detergent and warm water solution with soft, clean cloth.

END OF SECTION

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Silent Guard
Noise Reducing Windows & Doors